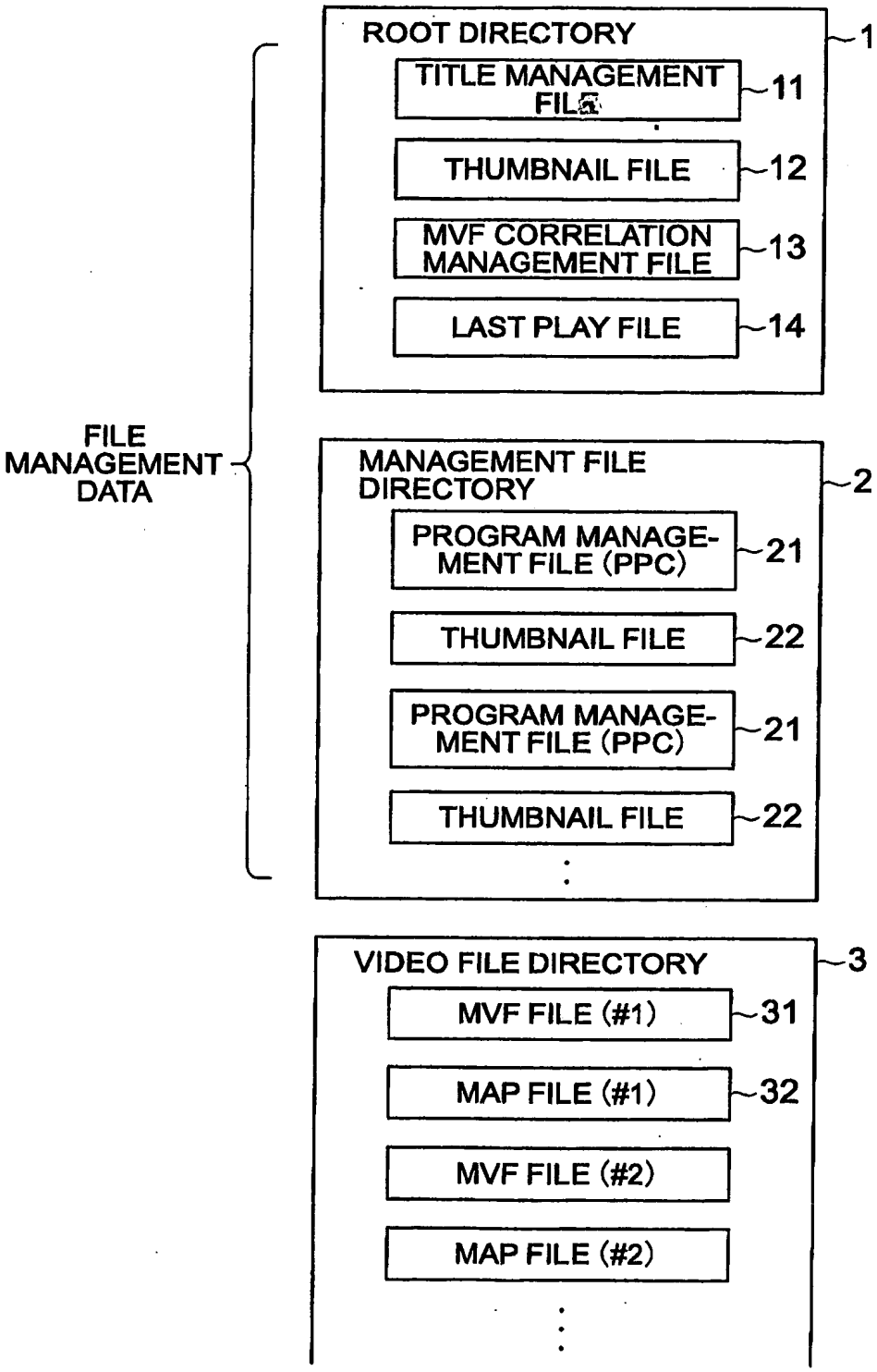
FILE MANAGEMENT DATA
ROOT DIRECTORY
1
TITLE MANAGEMENT FILE
11
THUMBNAIL FILE
12
MVF CORRELATION MANAGEMENT FILE
13
LAST PLAY FILE
14
MANAGEMENT FILE DIRECTORY
2
PROGRAM MANAGEMENT FILE (PPC)
21
THUMBNAIL FILE
22
PROGRAM MANAGEMENT FILE (PPC)
21
THUMBNAIL FILE
22
VIDEO FILE DIRECTORY
3
MVF FILE (#1)
31
MAP FILE (#1)
32
MVF FILE (#2)
MAP FILE (#2)

FIG. 1

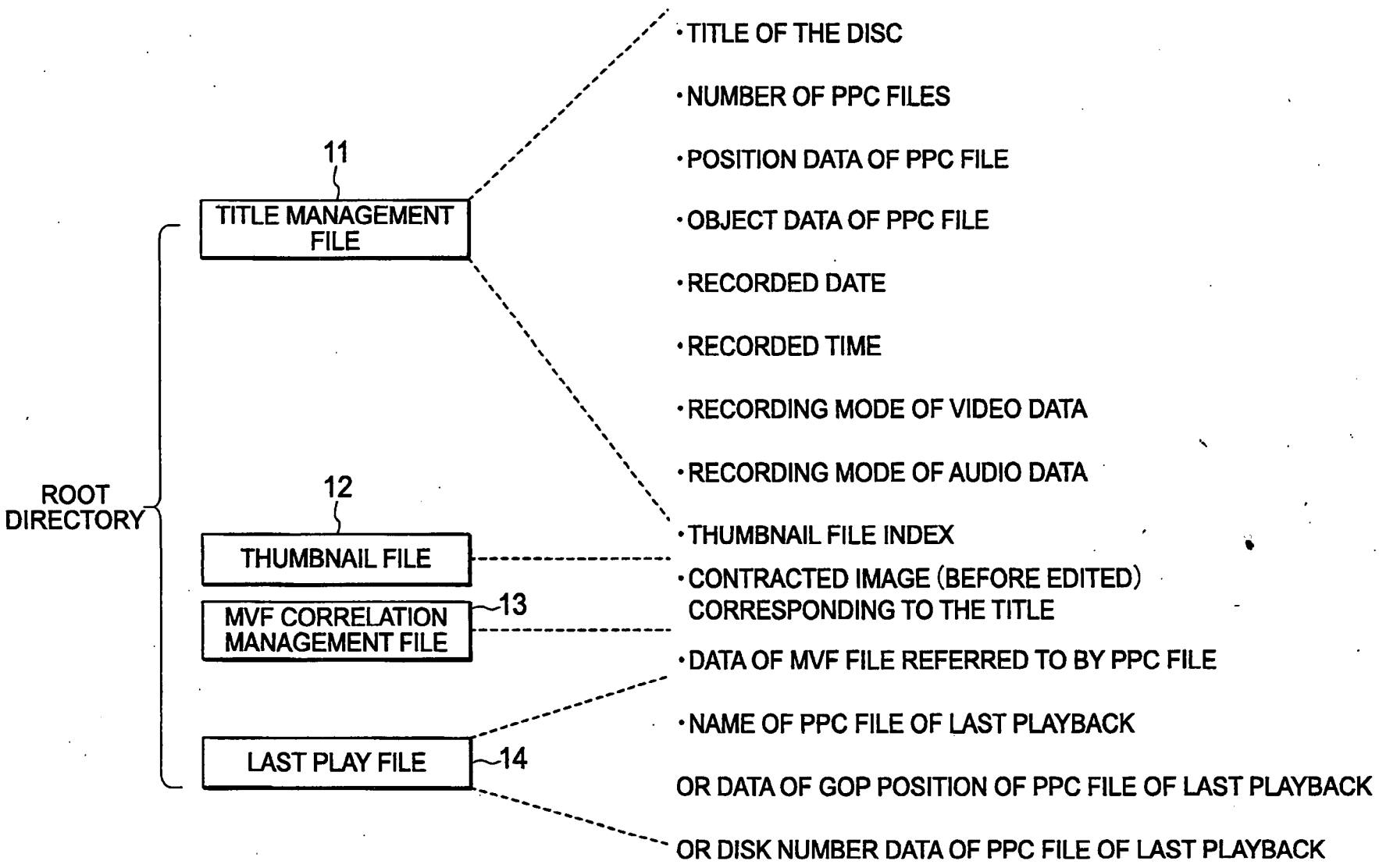
ROOT DIRECTORY
11
TITLE MANAGEMENT FILE
12
THUMBNAIL FILE
13
MVF CORRELATION MANAGEMENT FILE
14
LAST PLAY FILE
• TITLE OF THE DISC
• NUMBER OF PPC FILES
• POSITION DATA OF PPC FILE
• OBJECT DATA OF PPC FILE
• RECORDED DATE
• RECORDED TIME
• RECORDING MODE OF VIDEO DATA
• RECORDING MODE OF AUDIO DATA
• THUMBNAIL FILE INDEX
• CONTRACTED IMAGE (BEFORE EDITED) CORRESPONDING TO THE TITLE
• DATA OF MVF FILE REFERRED TO BY PPC FILE
• NAME OF PPC FILE OF LAST PLAYBACK
OR DATA OF GOP POSITION OF PPC FILE OF LAST PLAYBACK
OR DISK NUMBER DATA OF PPC FILE OF LAST PLAYBACK

FIG. 2

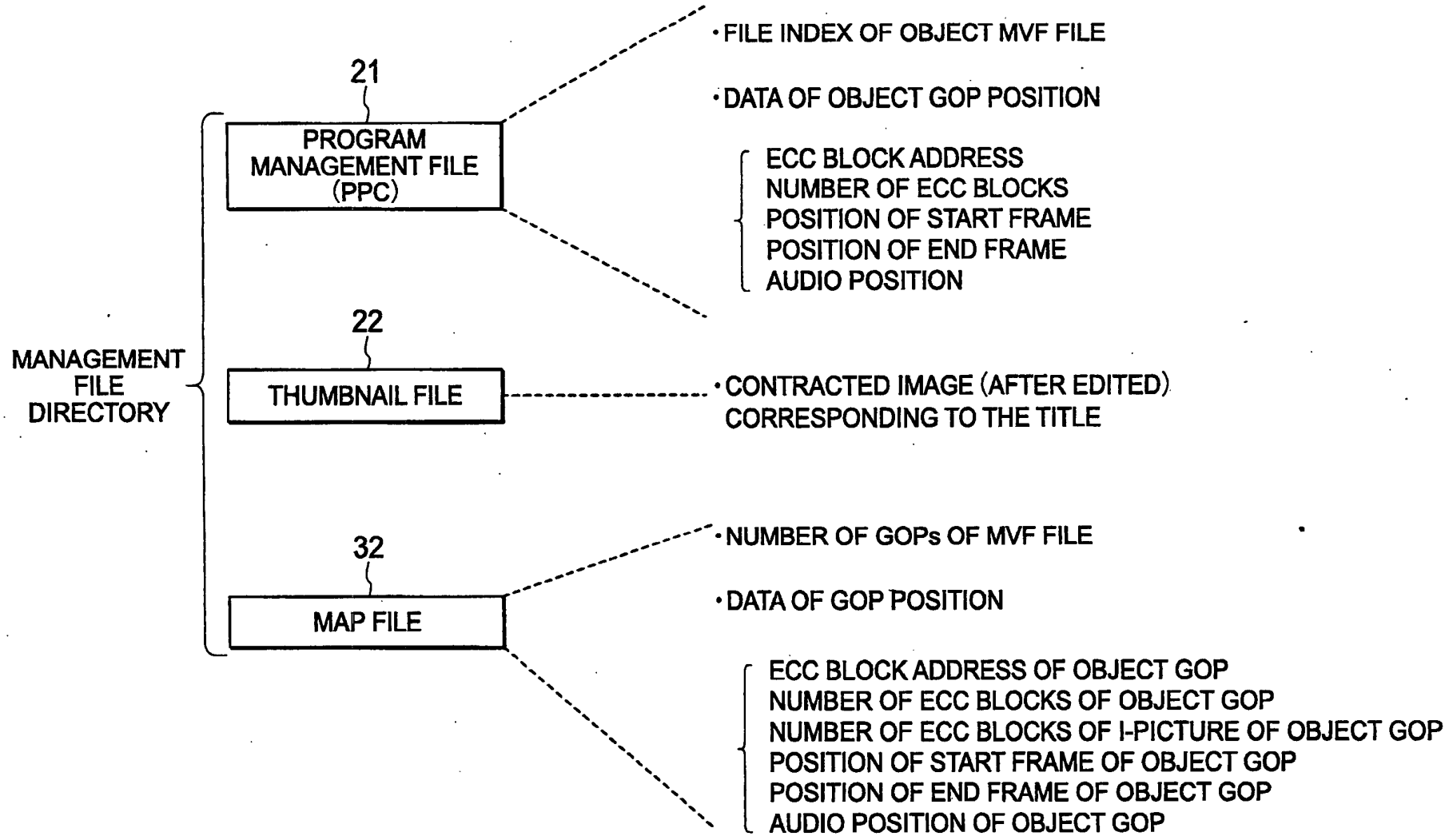
MANAGEMENT FILE DIRECTORY
21
PROGRAM MANAGEMENT FILE (PPC)
• FILE INDEX OF OBJECT MVF FILE
• DATA OF OBJECT GOP POSITION
ECC BLOCK ADDRESS
NUMBER OF ECC BLOCKS
POSITION OF START FRAME
POSITION OF END FRAME
AUDIO POSITION
22
THUMBNAIL FILE
• CONTRACTED IMAGE (AFTER EDITED) CORRESPONDING TO THE TITLE
32
MAP FILE
• NUMBER OF GOPs OF MVF FILE
• DATA OF GOP POSITION
ECC BLOCK ADDRESS OF OBJECT GOP
NUMBER OF ECC BLOCKS OF OBJECT GOP
NUMBER OF ECC BLOCKS OF I-PICTURE OF OBJECT GOP
POSITION OF START FRAME OF OBJECT GOP
POSITION OF END FRAME OF OBJECT GOP
AUDIO POSITION OF OBJECT GOP

FIG. 3

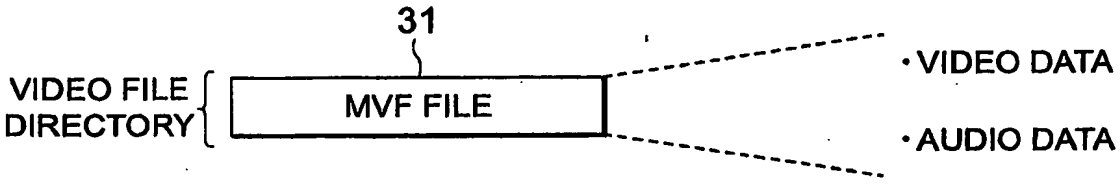
31
VIDEO FILE DIRECTORY
MVF FILE
• VIDEO DATA
• AUDIO DATA

FIG. 4

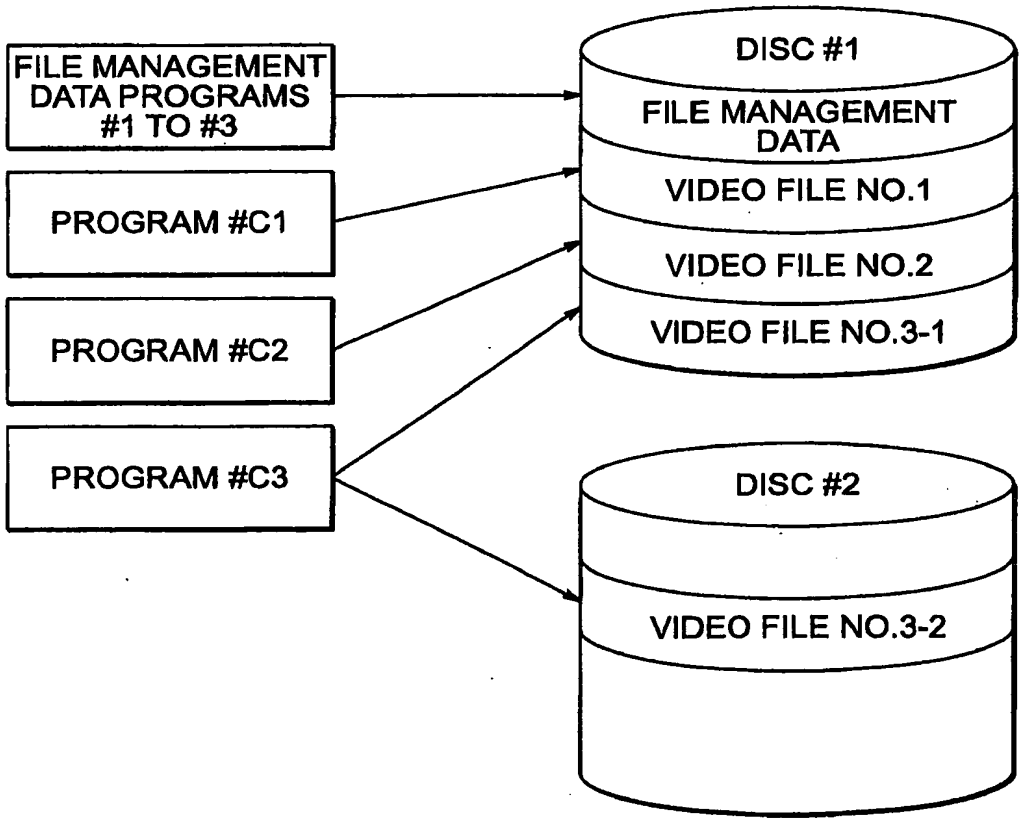
FILE MANAGEMENT DATA PROGRAMS #1 TO #3
PROGRAM #C1
PROGRAM #C2
PROGRAM #C3
DISC #1
FILE MANAGEMENT DATA
VIDEO FILE NO.1
VIDEO FILE NO.2
VIDEO FILE NO.3-1
DISC #2
VIDEO FILE NO.3-2

FIG. 5

005720 Tehn0560

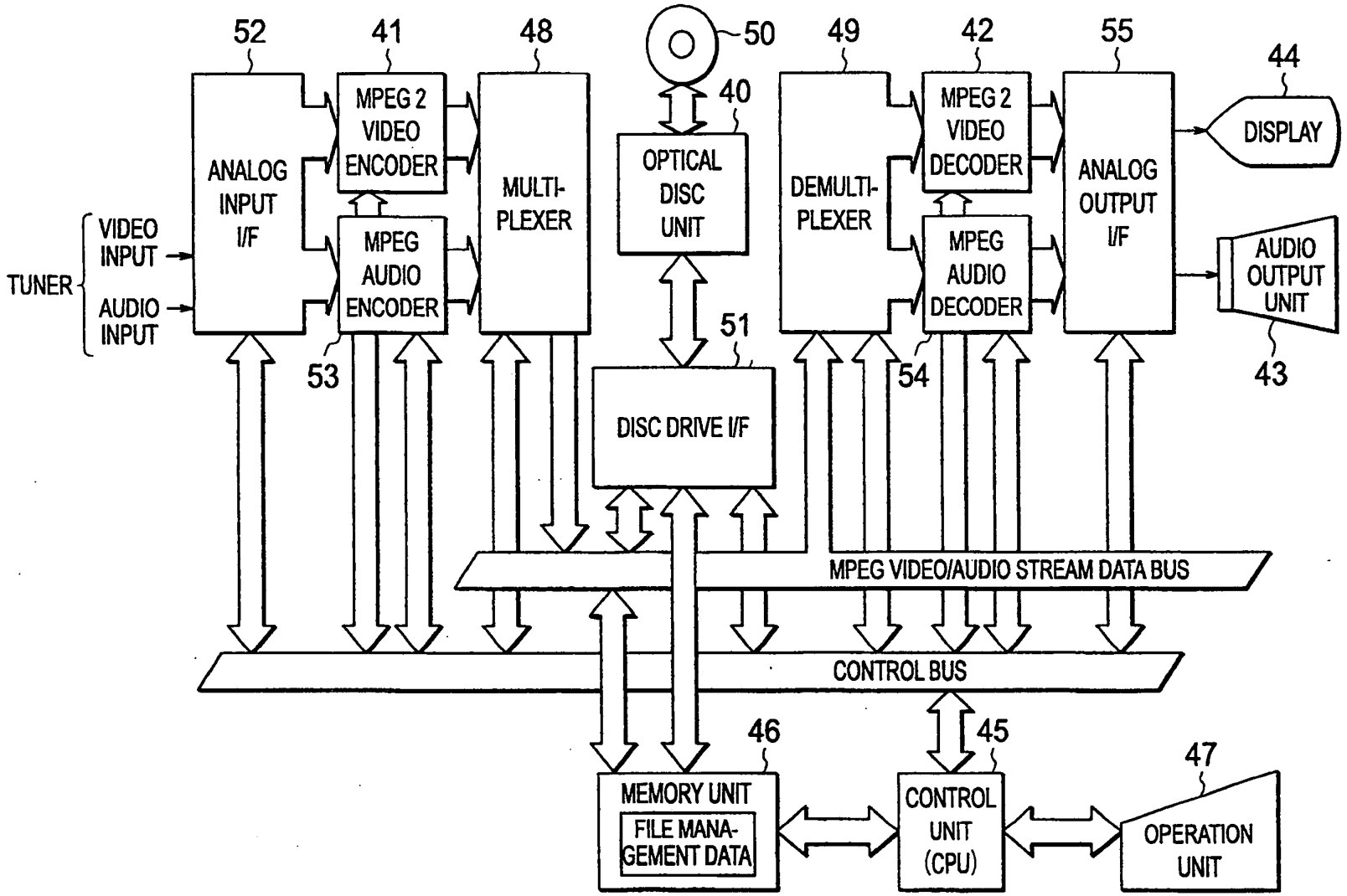

FIG. 6

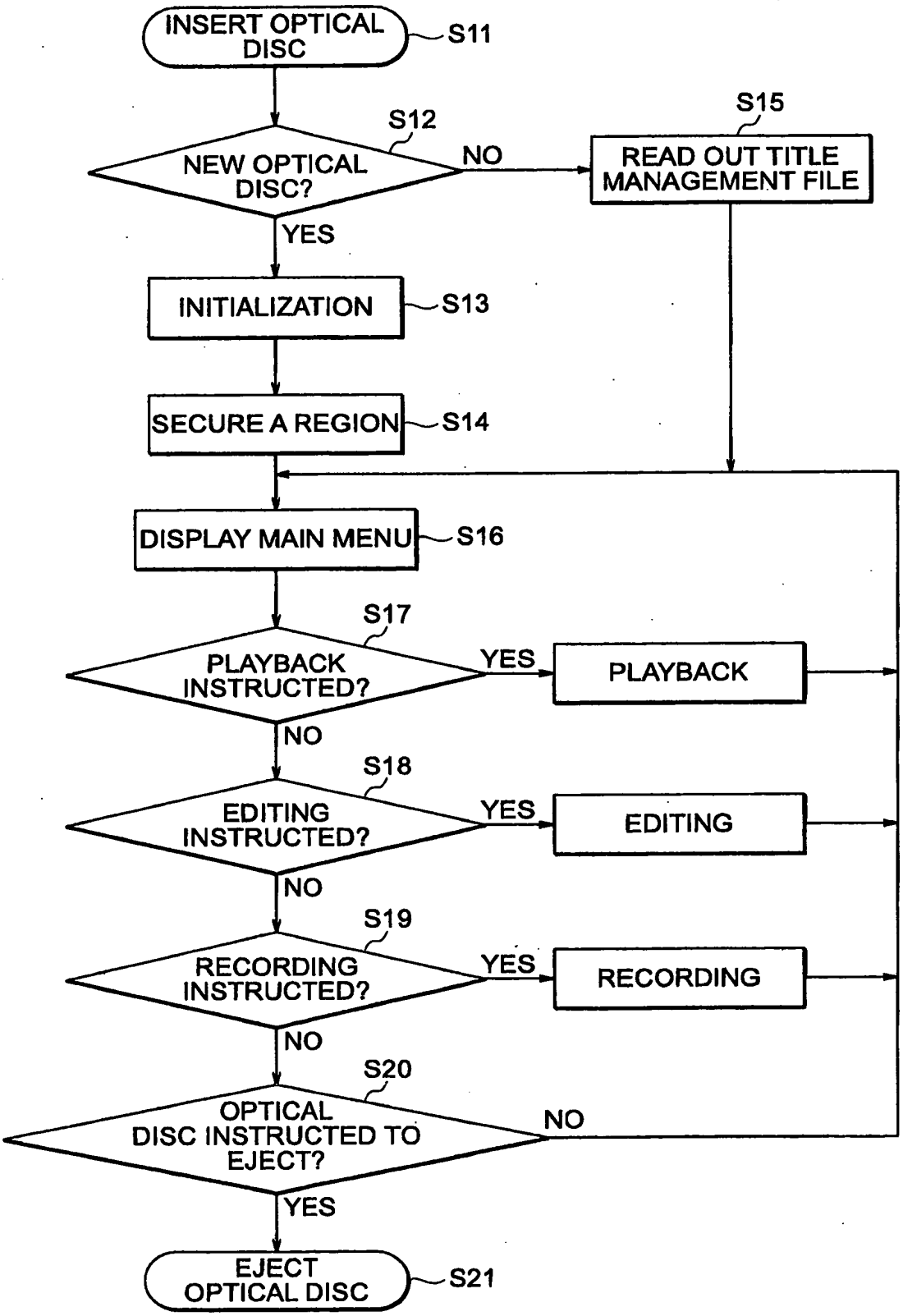
INSERT OPTICAL DISC
S11
S12
NEW OPTICAL DISC?
NO
S15
READ OUT TITLE MANAGEMENT FILE
YES
INITIALIZATION
S13
SECURE A REGION
S14
DISPLAY MAIN MENU
S16
S17
PLAYBACK INSTRUCTED?
YES
PLAYBACK
NO
S18
EDITING INSTRUCTED?
YES
EDITING
NO
S19
RECORDING INSTRUCTED?
YES
RECORDING
NO
S20
OPTICAL DISC INSTRUCTED TO EJECT?
NO
YES
EJECT OPTICAL DISC
S21

FIG. 7

09504431-021500

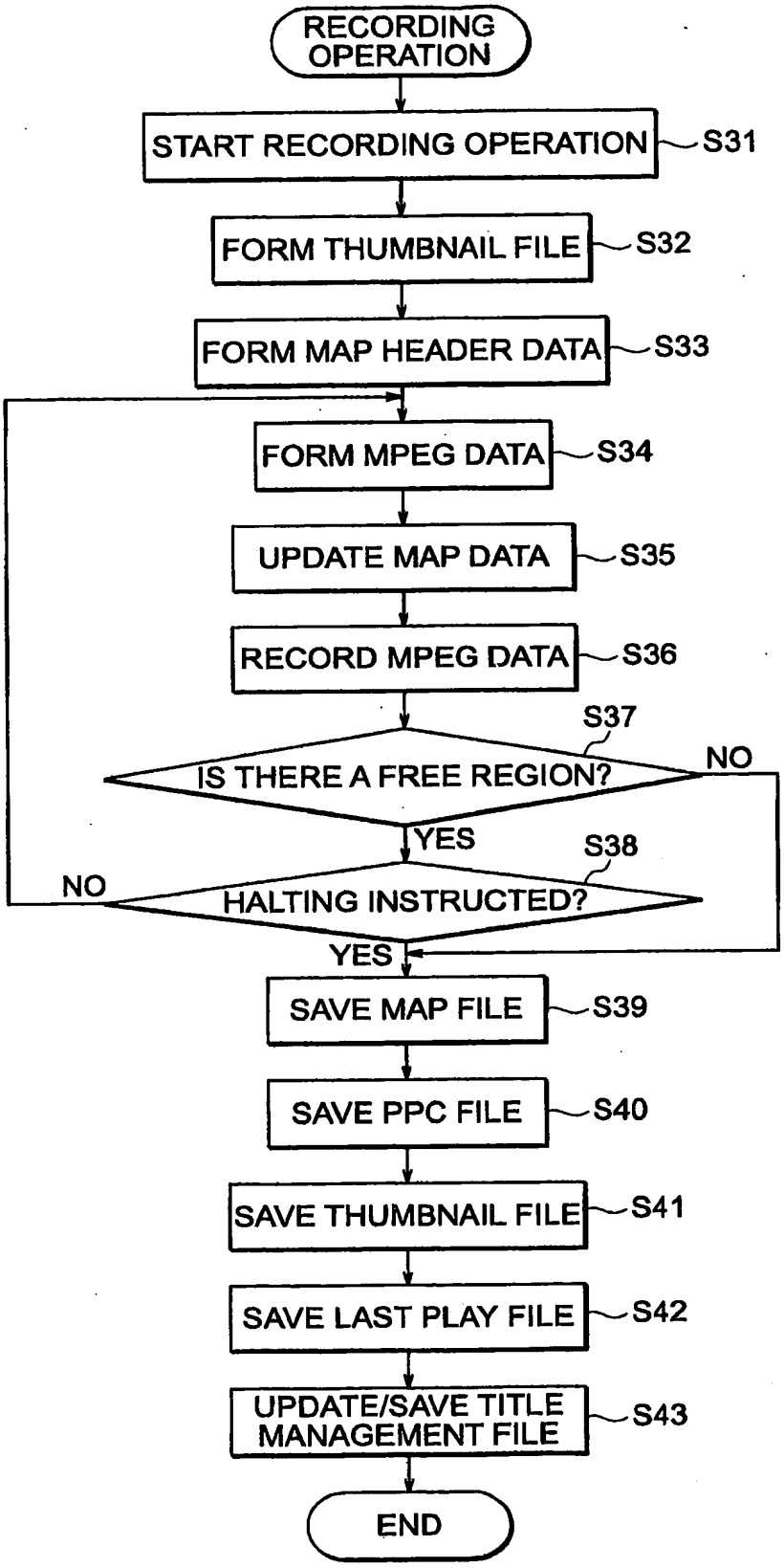

FIG. 8

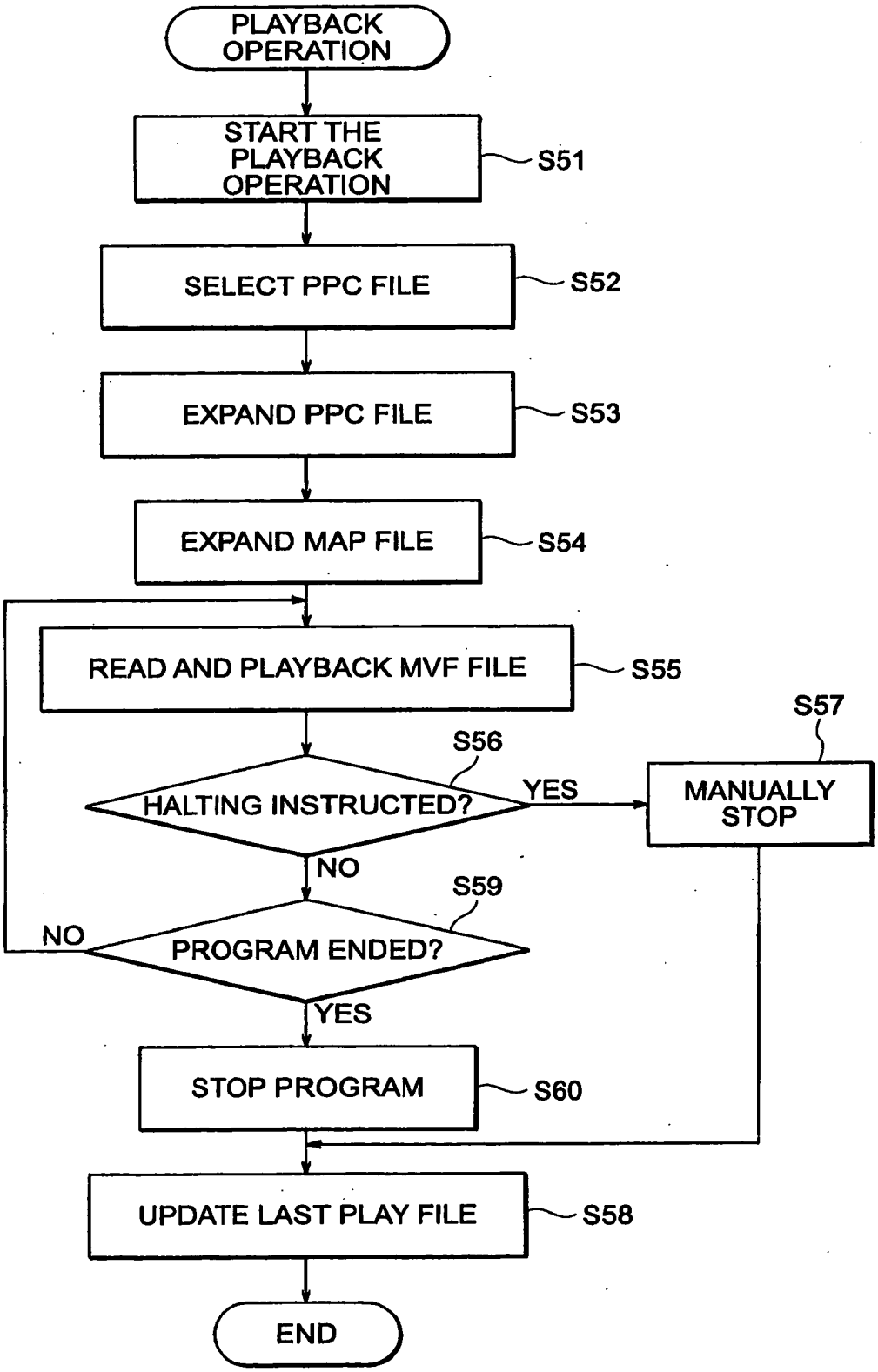
PLAYBACK OPERATION
START THE PLAYBACK OPERATION
S51
SELECT PPC FILE
S52
EXPAND PPC FILE
S53
EXPAND MAP FILE
S54
READ AND PLAYBACK MVF FILE
S55
S56
HALTING INSTRUCTED?
YES
S57
MANUALLY STOP
NO
S59
NO
PROGRAM ENDED?
YES
STOP PROGRAM
S60
UPDATE LAST PLAY FILE
S58
END

FIG. 9

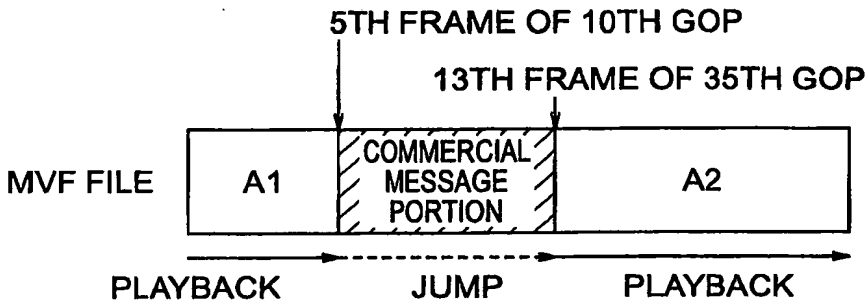

FIG. 10

GOP INDEX	ECC addr.	ECC blk.No.	I-Pic blk.No.	Start Frm	End Frm	Audio Offset	Audio ECC
9	280	12	2	1	15	11	1
10	292	13	3	1	15	12	1
11	305	13	3	1	15	12	1
...							
34	617	12	2	1	15	11	1
35	629	12	2	1	15	11	1

FIG. 11

GOP INDEX	ECC addr.	ECC blk.No.	I-Pic blk.No.	Start Frm	End Frm	Audio Offset	Audio ECC
9	280	12	2	1	15	11	1
10	292	13	3	1	4	12	1
35	629	12	2	13	15	11	1

FIG. 12

0550-4350-0550-4

I1 B2 B3 P4 B5 B6 P7 B8 B9 P10 B11 B12 P13 B14 B15

FIG. 13

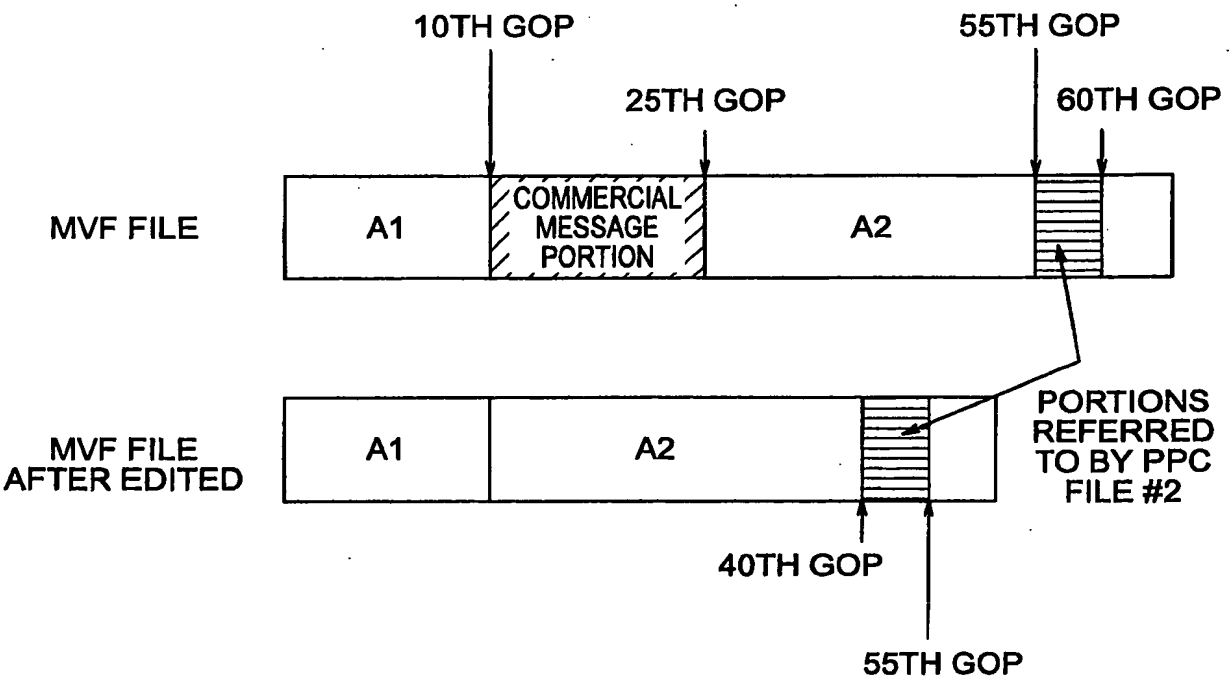

FIG. 14

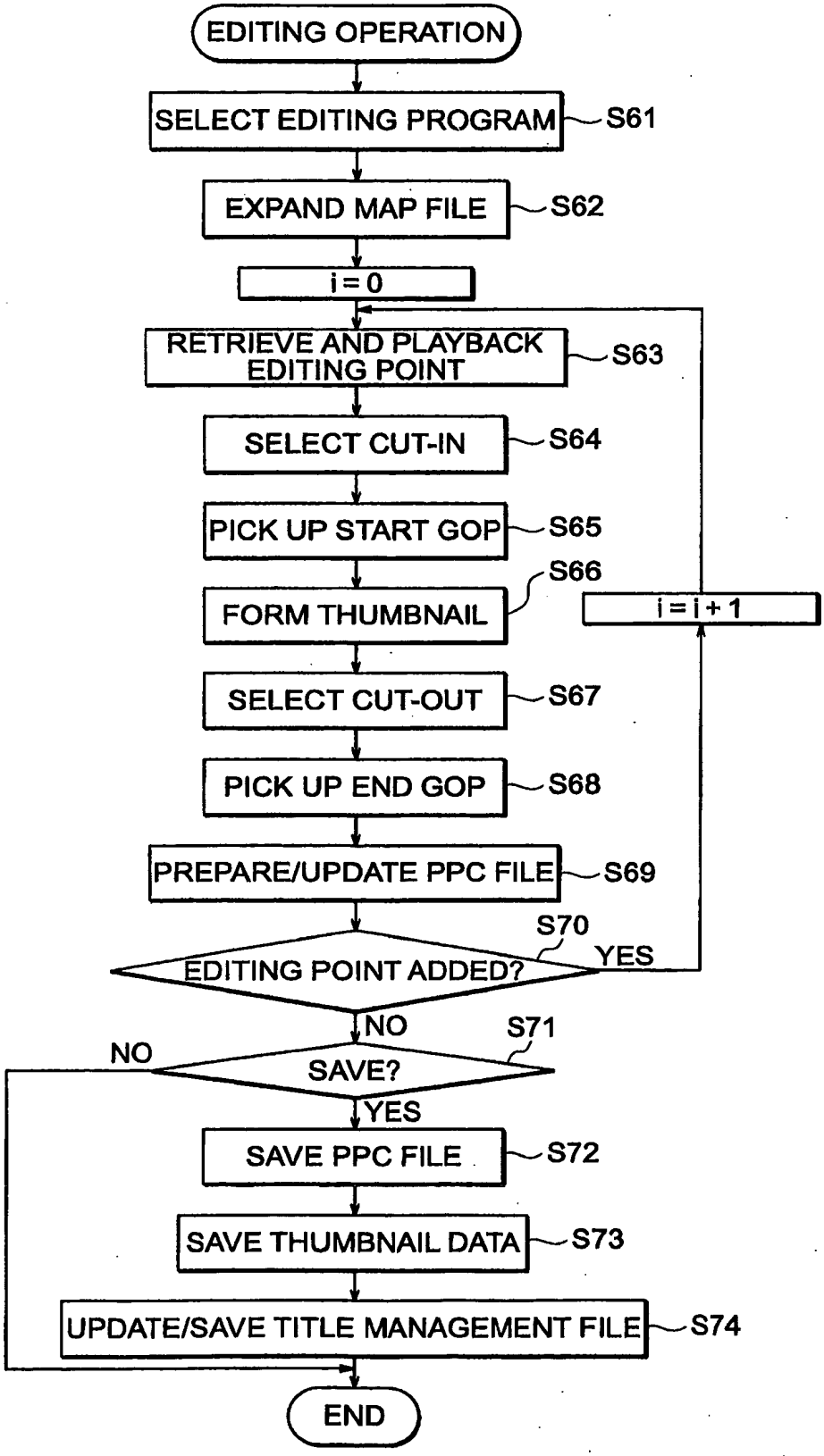
EDITING OPERATION
SELECT EDITING PROGRAM
S61
EXPAND MAP FILE
S62
i = 0
RETRIEVE AND PLAYBACK EDITING POINT
S63
SELECT CUT-IN
S64
PICK UP START GOP
S65
FORM THUMBNAIL
S66
i = i + 1
SELECT CUT-OUT
S67
PICK UP END GOP
S68
PREPARE/UPDATE PPC FILE
S69
EDITING POINT ADDED?
S70
YES
NO
SAVE?
S71
NO
YES
SAVE PPC FILE
S72
SAVE THUMBNAIL DATA
S73
UPDATE/SAVE TITLE MANAGEMENT FILE
S74
END

FIG. 15

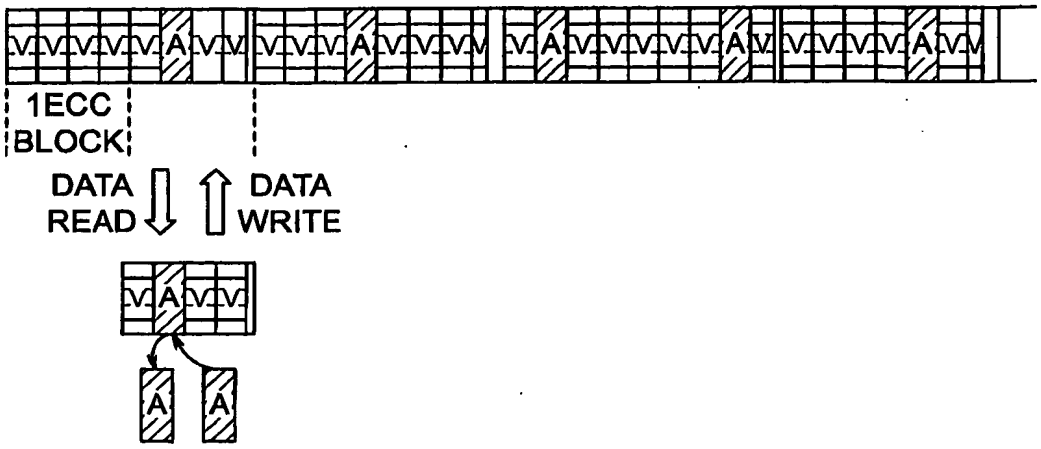
1ECC
BLOCK
DATA
READ
DATA
WRITE

FIG. 16

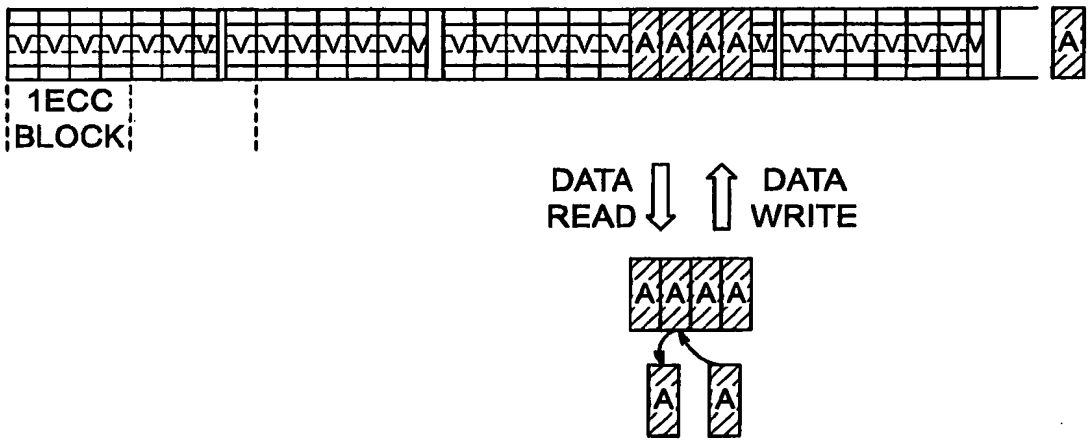
1ECC
BLOCK
DATA
READ
DATA
WRITE

FIG. 17

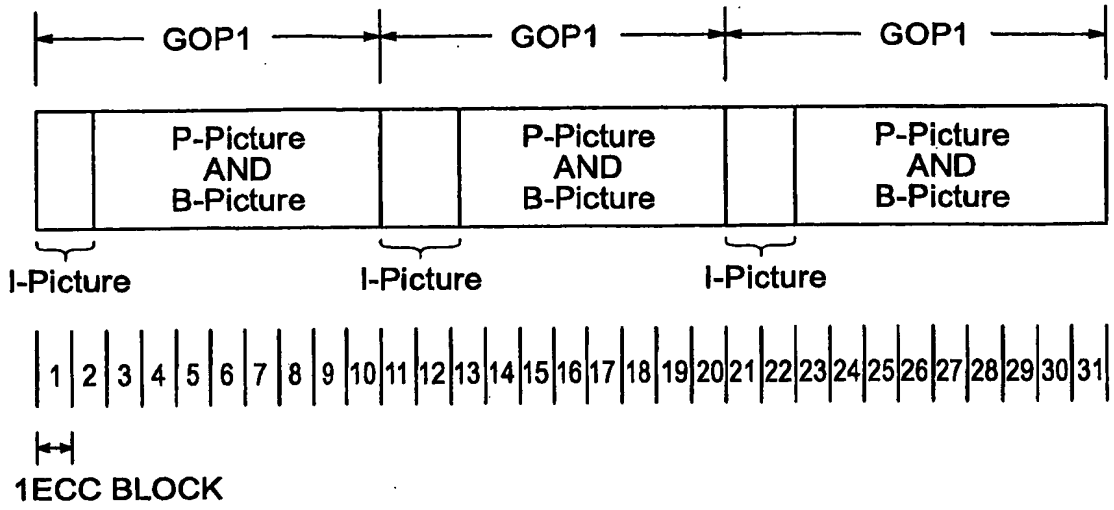

FIG. 18

SYSTEM HEADER	(GOP1) ECC BLOCK ADDRESS:1 NUMBER OF ECC BLOCKS:10 NUMBER OF I-PICTURE BLOCKS:2	(GOP2) ECC BLOCK ADDRESS:11 NUMBER OF ECC BLOCKS:10 NUMBER OF I-PICTURE BLOCKS:3	(GOP3) ECC BLOCK ADDRESS:21 NUMBER OF ECC BLOCKS:11 NUMBER OF I-PICTURE BLOCKS:2

FIG. 19

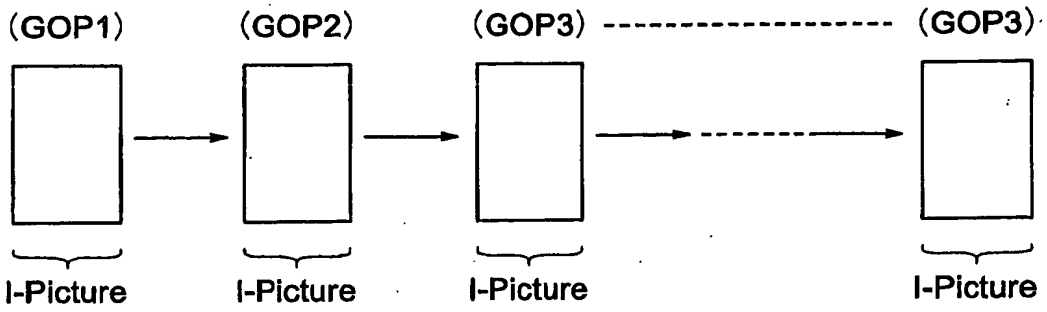

FIG. 20

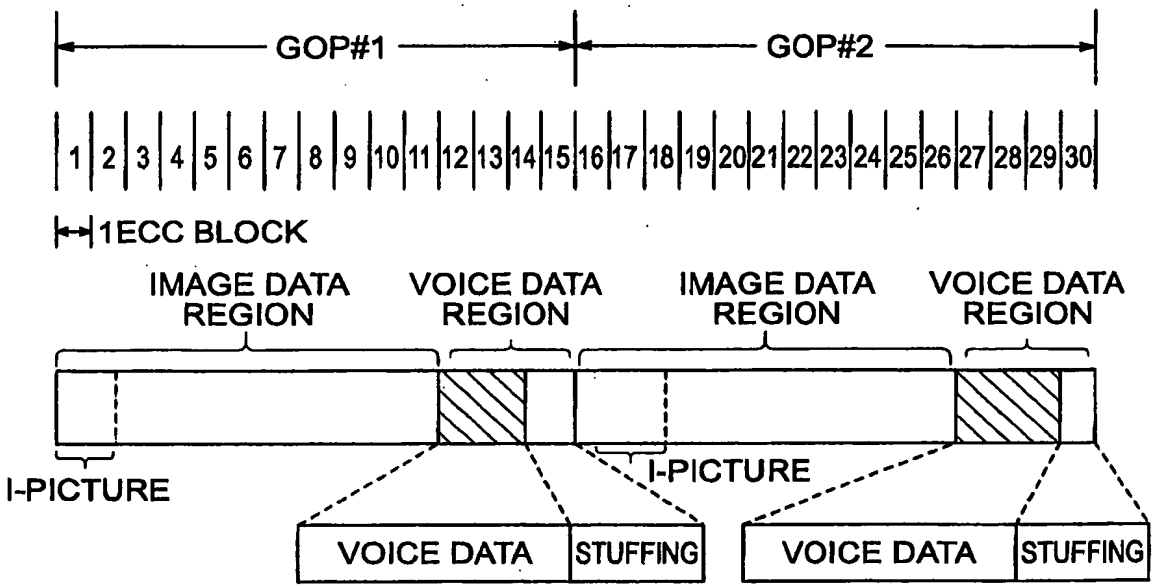

FIG. 21

STEREOPHONIC 1 CHANNEL

L,R	STUFFING

FIG. 22A

STEREOPHONIC 2 CHANNELS

L1,R1	L2,R2

FIG. 22B

MONOPHONIC

JAPANESE	STUFFING

FIG. 22C

SUBVOICE

JAPANESE	ENGLISH

FIG. 22D